23

WHAT IS CLAIMED IS:

An immunological and oral tolerance-inducing composition for prevention and/or treatment of atherosclerosis by the oral administration thereof, comprising an active component selected from the group consisting of modified low density lipoprotein, oxidized low density lipoprotein (Ox LDL), heat shock protein 60/65 (HSP 60/65), beta₂-glycoprotein-1 (β₂GP-1), functional derivatives thereof and mixtures thereof, in combination with a pharmaceutically acceptable carrier for oral administration.

- 2. An immunological and oral tolerance-inducing composition for prevention and/or treatment of a heart attack by the oral administration thereof, comprising an active component selected from the group consisting of modified low density lipoprotein, oxidized low density lipoprotein (Ox LDL), heat shock protein 60/65 (HSP 60/65), beta₂-glycoprotein-1 (β_2 GP-1), functional derivatives thereof and mixtures thereof, in combination with a pharmaceutically acceptable carrier for oral administration.
- 3. An immunological and oral tolerance-inducing composition for prevention and/or treatment of angioplasty-restenosis by the oral administration thereof, comprising an active component selected from the group consisting of modified low density lipoprotein, oxidized low density lipoprotein (Ox LDL), heat shock protein 60/65 (HSP 60/65), beta₂-glycoprotein-1 (β_2 GP-1), functional derivatives thereof and mixtures thereof, in combination with a pharmaceutically acceptable carrier for oral administration.
- 4. An immunological and oral tolerance-inducing composition for prevention and/or treatment of stroke by the oral administration thereof, comprising an active component selected from the group consisting of modified low density lipoprotein, oxidized low density lipoprotein (Ox LDL), heat shock protein 60/65 (HSP 60/65), beta₂-glycoprotein-1 (β₂GP-1), functional derivatives thereof and mixtures thereof, in combination with a pharmaceutically acceptable carrier for oral administration.
- 5. An immunological and oral tolerance-inducing composition according to claim 1, wherein said active component is a modified low-density lipoprotein.
- 6. An immunological and oral tolerance-inducing composition according to claim 1, wherein said active component is oxidized low-density lipoprotein (Ox LDL).



24

- 7. An immunological and oral tolerance-inducing composition according to claim 1, wherein said active component is an active derivative of oxidized low-density lipoprotein (0x LDL).
- 8. An immunological and oral tolerance-inducing composition according to claim 1, wherein said active component is heat shock protein 60/65 (HSP 60/65).
- 9. An immunological and oral tolerance-inducing composition according to claim 1, wherein said active component is an active derivative of HSP60/65.
- 10. An immunological and oral tolerance-inducing composition according to claim 1, wherein said active component is beta₂-glycoprotein-1 (β_2 GP-1).
- 11. An immunological and oral tolerance-inducing composition according to claim 1, wherein said active component is an active derivative of β_2 GP-1.
- An immunological and oral tolerance-inducing composition according to claim 1, wherein said active component is an active derivative of LDL which active derivative is lysophosphatidyl choline (LPC).
- 13. An immunological and oral tolerance-inducing composition according to claim 1, wherein said LDL is malondialdehyde LDL (MDA-LDL).
- A method for prevention and/or treatment of atherosclerosis in a subject, comprising orally administering an immunological and oral tolerance-inducing composition comprising an active component selected from the group consisting of modified low density lipoprotein, oxidized low density lipoprotein (Ox LDL), heat shock protein 60/65 (HSP 60/65), beta₂-glycoprotein-1 (β₂GP-1), functional derivatives thereof and mixtures thereof, in combination with a pharmaceutically acceptable carrier for oral administration.
- 15. A method for prevention and/or treatment of a heart attack in a subject, comprising orally administering an immunological and oral tolerance-inducing composition comprising an active component selected from the group consisting of modified low density lipoprotein, oxidized low density lipoprotein (Ox LDL), heat shock protein 60/65 (HSP 60/65), beta₂-glycoprotein-1 (β_2 GP-1), functional derivativ s thereof and mixtures thereof, in combination with a pharmaceutically acceptable carrier for oral administration.
- 16. A method for prev ntion and/or treatment of angioplasty-restenosis in a subject, comprising orally administering an immunological and oral tolerance-inducing composition comprising an active component selected from the





group consisting of modified low density lipoprotein, oxidized low density lipoprotein (Ox LDL), heat shock protein 60/65 (HSP 60/65), beta₂-glycoprotein-1 (β_2 GP-1), functional derivatives thereof and mixtures thereof, in combination with a pharmaceutically acceptable carrier for oral administration.

- 17. A method for prevention and/or treatment of stroke in a subject, comprising orally administering an immunological and oral tolerance-inducing composition comprising an active component selected from the group consisting of modified low density lipoprotein, oxidized low density lipoprotein (Ox LDL), heat shock protein 60/65 (HSP 60/65), beta₂-glycoprotein-1 (β₂GP-1), functional derivatives thereof and mixtures thereof, in combination with a pharmaceutically acceptable carrier for oral administration.
- 18. A method according to claim 14, wherein said active component is a modified low-density lipoprotein.
- 19. A method according to claim 14, wherein said active component is oxidized low-density lipoprotein (Ox LDL).
- 20. A method according to claim 14, wherein said active component is an active derivative of oxidized low-density lipoprotein (Ox LDL).
- 21. A method according to claim 14, wherein said active component is heat shock protein 60/65 (HSP 60/65).
- 22. A method according to claim 14, wherein said active component is an active derivative of heat shock protein 60/65 (HSP 60/65).
- 23. A method according to claim 14, wherein said active component is beta₂-glycoprotein-1 (β_2 GP-1).
- 24. A method according to claim 14, wherein said active component is an active derivative of beta₂-glycoprotein-1 (β_2 GP-1).
- A method according to claim 14, said active component is an active derivative of LDL which active derivative is lysophosphatidyl choline (LPC).
- 26. A method according to claim 14, wherein said LDL is malondialdehyde LDL (MDA-LDL).